NPS Form 10-900
(Rev. 8-86)

United States Department of the Interior
National Park Service

087-4240-0019

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Jefferson Old Town Bowstring Truss

other names/site number Jefferson Old Town Bowstring Truss

2. Location

street & number US Highway 59 ☐ not for publication

city, town Oskaloosa ☒ vicinity

state Kansas code KS county Jefferson code 87 zip code 66066

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
☐ private	☐ building(s)		buildings
☒ public-local	☐ district		sites
☐ public-State	☐ site	1	structures
☐ public-Federal	☒ structure		objects
	☐ object	1	Total

Name of related multiple property listing:
Metal Truss Bridges in Kansas

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ☐ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☒ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of certifying official — Date: Nov. 16, 1989

State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

☐ entered in the National Register.
☐ See continuation sheet.
☐ determined eligible for the National Register. ☐ See continuation sheet.
☐ determined not eligible for the National Register.
☐ removed from the National Register.
☐ other, (explain:) _____

Signature of the Keeper — Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)	Current Functions (enter categories from instructions)
Transportation: Road Related (Vehicular): Bridge	Transportation: Road Related (Vehicular): Bridge

7. Description

Architectural Classification (enter categories from instructions)	Materials (enter categories from instructions)
Other: Bowstring Pony Truss	foundation walls roof other Metal: Wrought Iron

Describe present and historic physical appearance.

The Jefferson Old Town Bowstring Truss, erected in 1875, is 48 feet long and 14 feet wide. It is located approximately 8 feet above the level of the water course.

The members of a truss bridge are designated either as chord members or web members. Chord members are those mainly defining the outlines of the structure and they are termed lower or upper chord members depending on whether they are found at the bottom or the top of the structure. Members between the chords are web members. They are called posts or ties if they sustain compression or tension respectively.

The Jefferson Old Town Bowstring Arch Truss is a tubular wrought iron design, patented on July 30, 1865 by Zenas King. His bridges were fabricated from flat plates rivited to channel iron.

The bridge is a tied arch with diagonal webs serving as bracing. The diagonal rods are threaded at both ends and pass through the upper and lower chord and are attached to the ends by nuts. The verticals consist of threaded wrought iron star bars which are attached to the upper and bottom chord in a similar manner with nuts. Deck beams, supporting the road, sit on top of the bottom chord members at the panel points.

The bridge was relocated to the present site in 1974. It is located over a small water course in a recreated historical village site. Access to the bridge is pedestrian only and wood posts are located at each approach. The site integrity of the bridge has been affected by the move but the structural integrity remains intact. The relocation has been accomplished sympathetically.

☐ See continuation sheet

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

☐ nationally ☒ statewide ☐ locally

Applicable National Register Criteria ☐ A ☐ B ☒ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Areas of Significance (enter categories from instructions)	Period of Significance	Significant Dates
Engineering	1875	1875
Transportation	1875	1875

Cultural Affiliation: n/a

Significant Person: n/a

Architect/Builder: King Iron Bridge Company

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

The great evolution of truss bridge construction began in the United States soon after the publication of Squire Whipple's historic work on stresses in 1840. Prior to this the design work was essentially that of trial and error, experience and judgement. He was also one of the first in our history to manufacture and erect his iron bridge designs. The Whipple bowstring dotted the countryside. As the ultimate compliments was imitation, his plans were widely copied with "improvements" that would protect the competitor from patent infringement. When his patent expired in 1869, hundreds more appeared many even copied down to the last detail.

Although King Iron Bridge Company did not organize under that name until 1871, Zenas King was building bridges in Northern Ohio as early as 1858. By 1884 the company boasted the largest highway bridge works in the United States. In addition to his Cleveland, Ohio home base, King opened a plant in Iola, Kansas in 1871, and manufactured a number of bridges. The city voted bonds to build the plant for him as they thought it would be a significant benefit to the city. King had also been courted by the city of Topeka. This courting continued after the opening of the Iola plant. King realized that the transportation opportunities available in Topeka were better than those of Iola and moved. The city defaulted on the bonds, as would Topeka a short year later, when King moved out of Topeka and consolidated his company in Cleveland.

The flat plates and channel iron used in King bridges were less expensive than the other tubular top chords then available and he was able to underbid his competitors throughout the country. By 1874 their catalog claimed an annual number of 250-300 tubular arches built with over 2,700 in use by that year. Both pony and through trusses were manufactured.

The Old Jefferson Town bridge is one of only nine remaining bowstring arch pony trusses remaining in Kansas, and one of three remaining the King patent.

☒ See continuation sheet

9. Major Bibliographical References

Victor C. Darnell, American Bridge Building Companies, Washington, DC: Society for Industrial Archeology Occasional Publication 4, 1984.

David Weitzman, Traces of the Past: A Field Guide to Industrial Archeology, New York: Charles Scribner's Sons, 1980.

James L. Cooper, Iron Monuments to Distant Posterity, DePauw University, F.H.W.A., Indiana Dept. of Highways, Indiana Dept. Natural Resources, N.P.S., 1987.

Dan G. Deibler, A Survey and Photographic Inventory of Metal Truss Bridges in Virginia, Charlottesville: Virginia Highway & Transportation Research Council, 1975.

Craig Daniels, "Historic Town Gets Span," Topeka Journal, Dec. 12, 1974.

Virginia Vorhees, "Bowstring Bridge in Old Town," Oscaloosa Independent, August 29, 1974.

☐ See continuation sheet

Previous documentation on file (NPS):

- ☐ preliminary determination of individual listing (36 CFR 67) has been requested
- ☐ previously listed in the National Register
- ☐ previously determined eligible by the National Register
- ☐ designated a National Historic Landmark
- ☐ recorded by Historic American Buildings Survey # _____
- ☐ recorded by Historic American Engineering Record # _____

Primary location of additional data:

- ☒ State historic preservation office
- ☐ Other State agency
- ☐ Federal agency
- ☐ Local government
- ☐ University
- ☐ Other

Specify repository: Kansas State Historical Society

10. Geographical Data

Acreage of property less than one acre

UTM References

	Zone	Easting	Northing
A	15	310680	4314280
B			
C			
D			

☐ See continuation sheet

Verbal Boundary Description

The nominated property is located on the NW 1/4, SW 1/4, NW 1/4, NW 1/4, section 4, township 10S, range 19E, on a tract measuring 48' x 14' whose northeast corner is represented by the northeast corner of the bridge. Beginning at the northwest, 48' northeast, and 14' southeast to the point of beginning.

☐ See continuation sheet

Boundary Justification

The boundary includes only that area that is historically associated with the nominated property.

☐ See continuation sheet

11. Form Prepared By

name/title larry Jochims

organization Kansas State Historical Society date September 20, 1989

street & number 120 W. 10th telephone (913) 296-3251

city or town Topeka state KS zip code 66612

The bridge was originally erected in 1875 across Rock Creek, 1.5 miles north of Meriden. Sometime in the 1950s it was relocated to a location, on a road now vacated, 1.5 miles south and 4 miles east of Valley Falls. In 1974, Old Jefferson Town, "an historical replica of an early-day Jefferson county town," acquired the structure and moved it for the third time to their site in the city of Oscaloosa.

Although the final move has affected the integrity of the structure in that only pedestrian traffic is allowed, it does cross a small stream and is being preserved. It can serve as a model as to what can be done to save a structure when removal is deemed necessary. In some ways, the location to such a park setting is an admirable method of raising the public awareness of the significance of our transportation and engineering heritage. It remains the example of a bridge fabricated and sold by a prolific out-of-state bridge builder. It still stands as a monument to the early settlers in the state and their striving for economic progress, it is worthy of listing.

The Kansas Department of Transportation (KDOT) carried out a statewide inventory of historic bridges between 1980 and 1983. The bridges to be included were identified through computer printouts developed by KDOT, from information supplied by the counties (since almost all of the historic bridges were located on secondary rather than the primary road system), and by direct observation by field personnel. All bridges were inspected by KDOT personnel to verify the data on file. That information was jointly evaluated by representatives of KDOT, Kansas State Historical Society, and the State Historic Preservation Officer.

Each structure was evaluated using a points rating system adapted from the points evaluation rating developed by the Ohio Department of Transportation and Ohio Historic Preservation Office. Consideration was given to areas such as age, builder, number of spans, length, special features, history, integrity, surviving numbers, and preservation potential.

In many instances there is little information about individual structures. Often bridge plaques which may have contained information have been removed, or the county's records are not complete or have been destroyed. Due to the large numbers of similar structures there is often little to choose from in differentiating among individual bridges other than condition and the likelihood of preservation.

The purpose of the KDOT study and subsequent evaluation was to identify a representative selection of bridges of each class. Through this approach KDOT and KSHS hope to preserve for posterity some examples of each type.

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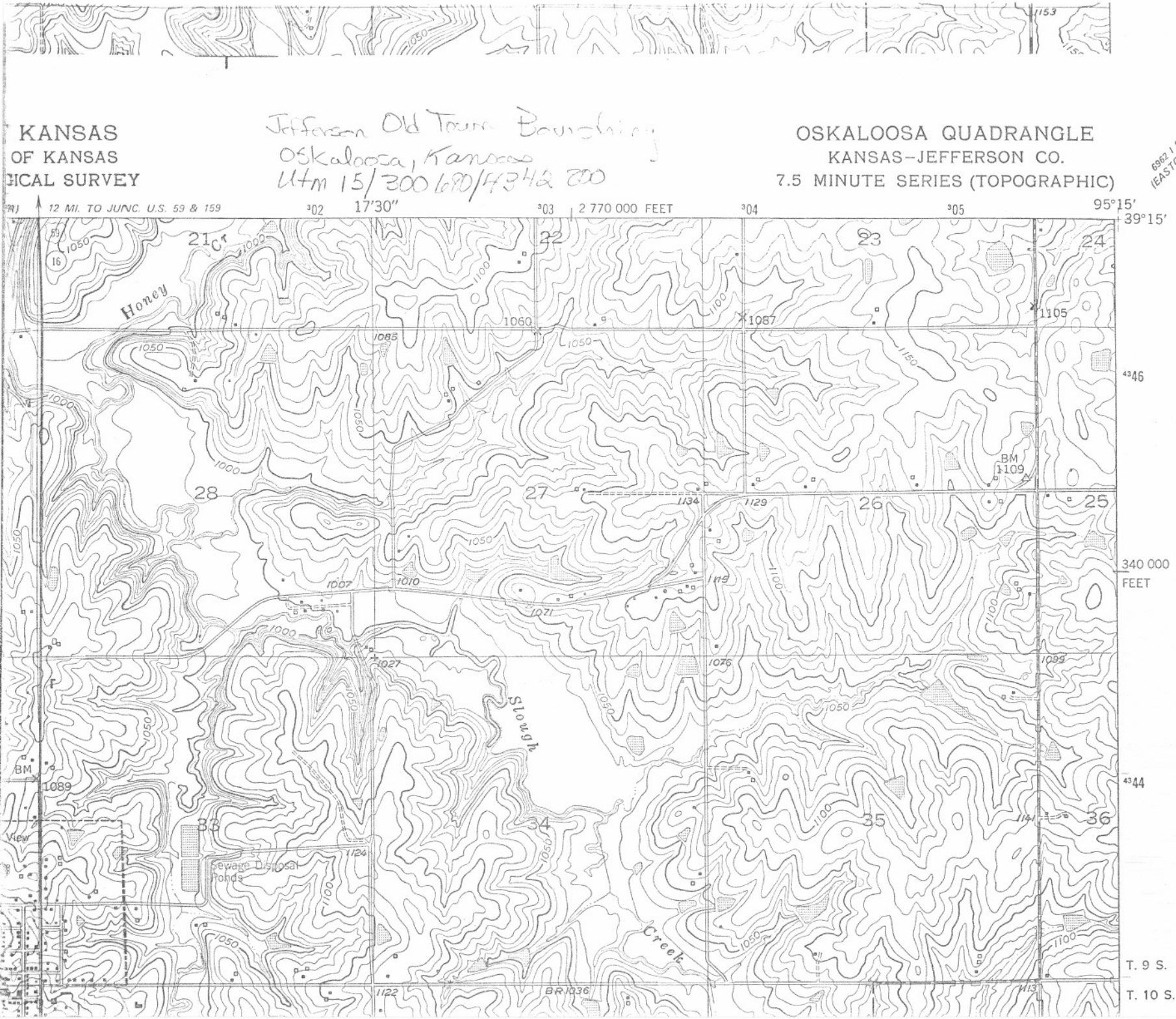
GICAL SURVEY

Jefferson Old Town Boundary
Oskaloosa, Kansas
Utm 15/300680/4342200

OSKALOOSA QUADRANGLE
KANSAS–JEFFERSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

6962 I SW
(EASTON SW)



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Jefferson Old Town Boundary
Oskaloosa, Kansas
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OSKALOOSA QUADRANGLE
KANSAS–JEFFERSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

6962 I SW
(EASTON SW)

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39°15'

4346

340 000 FEET

4344

T. 9 S.

T. 10 S.

Honey Cr

Slough Creek

Sewage Disposal Ponds

BM 1089

BM 1109

OSKALOOSA
(BM 1123)

DELAWARE RESERVATION